

Apr.1.2025 Copyright 2025 HIROSE ELECTRIC CO., LTD. All Rights Reserved.
In case of consideration for using Automotive equipment / device which demand high reliability, kindly contact our sales window correspondents.

Applicable standard					
Rating	Operating temperature range	-55 °C to +125 °C (95 %RH Max.)	Storage temperature range	-55 °C to +125 °C (95 %RH Max.)	
	Power	-- W	Characteristic impedance	50 Ω(0 to 18 GHz)	
	Peculiarity	----	Applicable cable	----	
SPECIFICATIONS					
ITEM	TEST METHOD		REQUIREMENTS	QT	AT
CONSTRUCTION					
General examination	Visually and by measuring instrument.		According to drawing.	X	X
Marking	Confirmed visually.			-	-
ELECTRICAL CHARACTERISTICS					
Contact resistance	100 mA Max.(DC or 1000 Hz)		Center contact 10 mΩ Max.	X	X
			Outer contact 10 mΩ Max.	X	X
Insulation resistance	500 V DC.		1000 MΩ Min.	X	X
Withstanding voltage	500 V AC for 1 min. current leakage 2 mA Max.		No flashover or breakdown.	X	X
Return loss	Frequency 0 to 18 GHz.		Return loss 20 dB Min.	X	X
Insertion loss	Frequency - to - GHz.		--- dB Max.	-	-
MECHANICAL CHARACTERISTICS					
Contact insertion and extraction forces (HRM)	φ 0.91 ^{+0.005} ₀ by steel gauge.		Insertion force --- N Max.	-	-
			Extraction force 1.5 N Min.	X	X
Contact insertion and extraction forces (SMP)	φ 0.35 ⁰ _{-0.005} by steel gauge.		Insertion force --- N Max.	-	-
			Extraction force 0.2 N Min.	X	X
Insertion and extraction forces	Measured by applicable connector.		Insertion force --- N Max.	-	-
			Extraction force --- N Min.	-	-
Mechanical operation	500 times insertion and extractions.		1)Contact resistance: Center contact 18 mΩ Max. Outer contact 18 mΩ Max. 2)No damage, crack and looseness of parts.	X	-
Vibration	Frequency 10 to 500 Hz single amplitude 0.75 mm, 98 m/s ² at 10 cycles for 3 directions.		1)No electrical discontinuity of 1 μs. 2)No damage, crack and looseness of parts.	X	-
Shock	490 m/s ² directions of pulse 11 ms at 3 times for 3 directions.			X	-
Cable clamp strength (Against cable pull)	Using a pulling tester, pull the cable axially at a rate of mm/min. and record the strength at which the cable or connector breaks.		N Min.	-	-
ENVIRONMENTAL CHARACTERISTICS					
Damp heat	Exposed at -10 to +65 °C, 90~98 % total 10 cycles.(240 h)		1)Insulation resistance: 100 MΩ Min. (at high humidity) 2) Insulation resistance: 1000 MΩ Min. (at dry) 3)No damage, crack and looseness of parts.	X	-
Rapid change of temperature	Temperature -65 → - →+125 → - °C Time 30 → 3 →30 → 3 min. Under 5 cycles.		No damage, crack and looseness of parts.	X	-
Corrosion salt mist	Exposed in 5 % salt water spray for 48 h.		Return loss 20 dB Min.	X	-
	Count	Description of revisions	Designed	Checked	Date
△					
Remark RoHS COMPLIANT			Approved	KY.SHIMIZU	16.11.04
			Checked	KY.SHIMIZU	16.11.04
			Designed	TY.OZAKI	16.11.04
Unless otherwise specified, refer to IEC 60512.			Drawn	TY.OZAKI	16.11.04
Note	QT:Qualification Test AT:Assurance Test X:Applicable Test		Drawing No.	ELC-364324-00-00	
HRS	SPECIFICATION SHEET		Part No.	HRMJ-SMPJ-18G	
	HIROSE ELECTRIC CO., LTD.		Code No.	CL311-0002-0-00	△ 1/1